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ABSTRACT

This paper, based on a doctoral dissertation, focuses on spending inequalities within a single large city school district. The allocation/expenditure patterns of the 32 New York City "decentralized" units are compared for fiscal year 1976. Significant resource disparities were found among the community districts. These appeared to be wholly arbitrary or accidental and not due to any deliberate educational design. Major problem areas in policy formulation and implementation were identified. These included: (1) accuracy in projecting registers, (2) accuracy in projecting average teacher salary, (3) building utilization (pupils per building), (4) operating within the confines of a fiscal year, (5) the fiscal crisis, and (6) developing a deliberate educational design. It is concluded that all policies and practices affecting the allocation and expenditure of funds and/ or resources must reflect a deliberate educational design. (Author/AM)

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Slicing the Slice:

EQUITY IN FINANCING WITHIN A LARGE URBAN DISTRICT

BY

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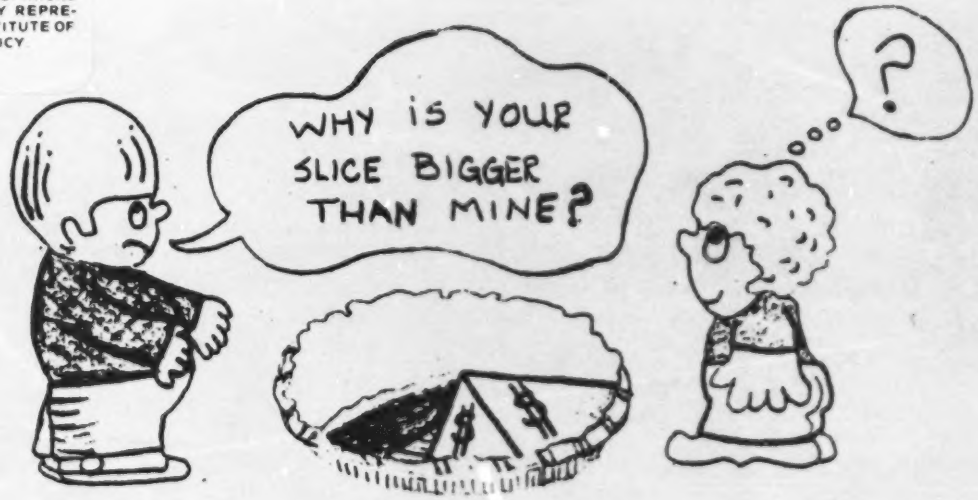

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PREFACE

The reader should note that this paper presents some of the highlights of an exhaustive study of the research problem. It was presented in its original form as a doctoral dissertation under the title An Exploratory Analysis of Tax Levy Instructional Allocations and Expenditures of New York City Community School Districts Regarding "Equal Educational Opportunity," "Criteria for Investment in Educational Services," and "Operational Decentralization (Teachers College, Columbia University, New York, 1977).

It is not intended that this paper represent a summary of the dissertation. Rather, it should be viewed as an extension, focusing on selected "major" problem areas or roadblocks in policy formulation and implementation as they relate to "equalizing educational opportunity" in the New York City Public School System as well as in school districts in general.

INTRODUCTION

The philosophy of equalizing educational opportunities has been the target of considerable debate both in adopting a sound educational plan, as well as within the context of the law. While a great deal of evidence has been amassed on inequities in school revenues and tax capacities between districts, less evidence exists regarding resource allocations within individual school districts. It should be noted, however, that just as inequality between school districts can be attributed to variances in local revenues, inequities can be created within a single school district by local policies and practices. While the effects of local policies and practices can be seen in school districts of all sizes, they are more pronounced in large city school systems. This can be attributed to the fact that policies and practices of large city school systems utilize broad categories and inflexible allocation criteria which may not be sufficiently sensitive to the differing characteristics of neighborhoods and school sites.

Much controversy exists over exactly what "equal educational opportunity" means. In fact, it is difficult to find a generally acceptable definition of "education," let alone what is "equal." Clearly, schools have assumed increased social responsibilities since the days of the one room school house. Programs and services such as health, guidance, food services, security, transportation, pre-school, and summer and after school centers, represent some of the substantial increases over a program of the three "R's". As yet, there is no universal acceptance of from where these programs and services should be provided, or if their purposes represent a goal of education. For example, in some districts, school security is a police function, and summer and after school programs are

the responsibility of the private sector, while in other districts all of the aforementioned programs and services are considered the "business" of education. Yet, we are led to believe that the edict of "equal educational opportunity" is satisfied if per pupil spending levels are for the most part equal. It seems obvious that what is being bought is just as important as how much is being spent.

It should be pointed out that while nothing prohibits the providing of more funds for specialized programs or indeed any special interest group, such distinctions can only be made as a matter of "public policy," and not arbitrarily. Since "public policy" varies from district to district it is difficult to challenge the lack of "equal educational opportunity" between districts on the basis of differences in "public policy." Within an individual school district this is not the case since policies and practices are, for the most part, universal for the entire system. Thus, in studying the present problem "equal educational opportunity" is defined in terms of policies of the individual district under scrutiny, in this case, the New York City Board of Education. However, in accepting this definition, two criteria are important.

First, are the public policies governing the allocation of resources arbitrary? In this regard, it must be determined that resources have not been allocated on the basis of any "suspect classification." That is, it must be demonstrated that any inequality in resource allocation is made on the basis of a "compelling interest" and that any such distinction is necessary to further its (the district's) purpose. Second, it must be demonstrated that the implementation of such policies is not arbitrary. That is to say, even if it can be demonstrated that public policies

satisfy a notion of "equal educational opportunity" a failure to enforce these policies would be tantamount to promoting inequities.

In developing "objective formulae" for allocating funds to its thirty-two decentralized units (community school districts), the New York City Board of Education attempted to adopt a strategy consistent with the idea of "equal educational opportunity for all youth."[1] This effort, according to the Board, reflects its obligation to follow federal, state, and city laws that prohibit discrimination against any student, regardless of sex, race, ethnicity, or place of residency.[2] While the Board, in formulating policy regarding "equal educational opportunity," recognized the lack of an explicit definition, it did choose to adopt a formula identifying its objectives.[3] Ar overview of this allocation formulae is presented in Appendix A. Briefly stated, the New York City Board of Education considered "relative cost" (resource equalization) and "relative needs" (outcome equalization) as crucial in "equalizing educational opportunities." However, the source of the Board's knowledge about exactly how many dollars it takes to meet a given "need" is not known. Since knowledge of this type, which requires knowing the applicable "education production function," is generally lacking in education, it is doubtful that the Board has the "objective formulae" it claims. Nevertheless, it does have a formulae, and the funds appropriation consequences of this formulae will be examined in the pages which follow.

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1. Gifford, Policy Paper No. 3, p.1.
2. Ibidl, p.1
3. This formulae, along with policies regarding expenditures, can be viewed as an operational definition regarding the Board's strategy in equalizing educational opportunities.

Developing A Theoretical Framework For Dealing With The Research Problem

In analyzing the research problem it becomes apparent that the first question we must ask empirically is: are resource inequalities observed within a large city school system, in this case, New York City? Second, if inequalities of significant magnitude are observed, can they be explained by appeal to a deliberate educational design?

In seeking answers to these questions, information and data concerning the allocations and expenditures of the "decentralized" school districts of New York City for Fiscal Year 1976 were collated and analyzed.[1] The concept of "budget portions" was introduced and used as a reference for a comparative analysis of the thirty-two (32) New York City community school districts. Again, it was important to determine not only how much was spent, but also what was bought.

The first budget portion is that pertaining to those funds needed to comply with city, state or federal laws or regulations as well as that of meeting contractual obligations. Expenditures in this portion of the budget can be considered system-wide requirements. Over this portion of the budget the individual school district has no control - it is mandated. Second, is that portion of the budget, which while not mandated, represents felt or

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1. The simplicity of the operational definitions and hypotheses of this study should not lead the reader to underestimate the complexity of the research problem or the design of the study. It should be noted that no single source, not even the New York City Board of Education, had available all the necessary data and information required to complete the research objectives. Rather, an exhaustive search of a multitude of sources ranging from individual decentralized school districts, and bureaus and divisions of the Central Board of Education, to various city, state, and federal agencies was made in the collection of the "raw" data. Further, since much of the required data regarding the previously identified variables was unavailable from any source, extremely lengthy and complex calculations were necessitated in order to translate "raw" data into the required form corresponding to the variables under scrutiny.

established need or necessity. For example, districts hire principals to administer each of its schools and provide substitutes to replace the daily absences of its teachers. This is done out of necessity as there appears to be no other viable alternative within the district's control. Such expenditures, while not "mandatory" may reasonably be described as "necessary."

There is some flexibility in the remaining portion of the school budget. These funds might be used to develop innovative or experimental programs, initiate change within the educational delivery system, reduce class size, or otherwise alter the mix of services.

In other words, in comparing resources, it is important to consider (1) costs associated with satisfying minimum system-wide requirements, (2) costs considered necessary or essential in implementing the minimum educational program (based on system-wide requirements), and (3) those remaining funds available to purchase resources in extending the educational program beyond the base minimum requirement. In this regard, within each decentralized unit, three budget portions were identified: (1) "required or mandatory," (2) necessary or essential," and (3) "flexible or marginal." However, it is the "flexible or marginal budget portion that can be seen as playing the crucial role. That is, after expending funds in the required and necessary budget portions each district can be considered as having established a base minimum educational program that satisfies, in part, the Board's philosophy of "equal educational opportunity." Therefore, an analysis of inter-district variations in the availability of remaining funds (the marginal budget portion) would serve to document existing resource inequalities.

If inequalities of a significant magnitude are observed and it is demonstrated that they cannot be explained by appeal to deliberate educational design (Central Board's), exploration will be made into identifying specific problem areas or roadblocks in policy formulation.

Documenting and Explaining Variances

It should be emphasized that merely comparing the total amount of each district's marginal budget portion would not suffice, in that, districts vary in size (pupil numbers). Therefore, in order to assess the relative relationship of districts in documenting resource inequalities, a comparison of funds available on a per pupil basis within a district's marginal budget portion was necessitated. Theoretically, if each district was comprised of equivalent pupil populations then "equal educational opportunity" would have been achieved if per pupil marginal budget portions were equal throughout the system. This, of course, is an oversimplification of the problem, in that, educating diverse pupil populations will require varied levels of expenditure. However, what can be considered is whether the intentions of the Board of Education in establishing the "Objective Formulae" for allocating instructional funds to the thirty-two community school districts, which purported to equalize educational opportunities, (according to the Board's definitions) were in fact realized.

A statistical analysis of per pupil marginal budget portions provided important information about the distribution. The mean of the distribution was $127.53 with a maximum of $178.20 and a minimum of $82.28, a range of $95.92. To fully understand the significance of this variance consider that this would represent at the mean district register (22,914 pupils) an average marginal budget of $2,922,156, a maximum marginal budget of

$4,083,213, and a minimum marginal budget of $1,855,336. The range of marginal budget portions at the average district register would be $2,197,878. That is, if all districts had an equal register it was conceivable that the district with the greatest marginal budget would have had a marginal budget of $2,197,878 more than the district with the smallest marginal budget. This would represent a per pupil marginal budget funding advantage of more than 2 to 1.

If significance is measured in terms of standard deviations above and below the mean, the results can be considered highly significant as the distribution indicates twelve scores one or more standard deviations above and below the mean.[1] It is therefore, concluded that significant resource inequalities existed.

However, the Board did, in fact, allocate resources (in dollars) unequally by deliberate design. In this regard, it is important to analyze whether the observed resource inequalities resulted from this design.

The "Objective Formulae" for allocating Tax Levy Module 2 funds considered workload weighting factors (educational level and Title I status of pupils), average teacher salaries, and educational need (percent of pupils reading below minimum competency) as crucial in equalizing educational opportunities. Districts with a high workload weighting factor, a high average teacher salary, and a high educational need, according to the formulae, should have had a correspondingly high ratio of marginal budget (dollars) per pupil. Yet all these factors combined account for only 32.515 percent of the interdistrict variance in marginal budgets. The

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1. Table 1 lists each district's per pupil marginal budget portion and corresponding "Z" score (standard deviations above and below the mean.)

TABLE 1

Breakdown of Dollars Per Pupil (Adjusted Marginal Budget)
by District - "Z" Scores

	Dollars/Pupil (Adjusted Marginal Budget)	"Z" Score
1	133.61	0.2769
2	139.34	0.5377
3	132.60	0.2309
4	82.28	-2.0600
5	104.59	-1.0443
6	126.31	-0.0555
7	178.20	2.3068
8	139.80	0.5587
9	132.04	0.2054
10	144.11	0.7549
11	126.72	-0.0368
12	123.07	-0.2030
13	134.56	0.3201
14	153.16	1.1669
15	151.95	1.1118
16	162.57	1.5953
17	158.47	1.4086
18	129.76	0.1016
19	134.66	0.3247
20	123.12	-0.2007
21	87.98	-1.8005
22	105.09	-1.0215
23	109.78	-0.8080
24	137.65	0.4608
25	116.88	-0.4939
26	98.16	-1.3370
27	118.01	-0.4333
28	105.57	-0.9997
29	110.01	-0.7976
30	128.81	0.0583
31	101.31	-1.1936
32	150.95	1.0663

Mean	127.529
Variance	482.491
Range	95.920

Valid Observations - 32

Std Error	3.883	Sid Dev	21.966
Kurtosis	-0.272	Skewness	0.038
Minimum	82.280	Maximum	176.200

Missing Observations - 0

remaining 67.485 percent of this variance is unaccounted for. This was computed by multiple regression utilizing "dollars per pupil in the marginal budget portions" as the dependent variable and "workload factors," "average teacher salary," and "percent pupils reading below minimum competency" as dependent variables. Thus, it can be concluded that the existing resource disparities appear to be arbitrary or accidental and not due to any deliberate educational design.

Identifying Major Problem Areas - New York City

In this section, major problem areas are discussed with reference to the questions stated in accepting a definition of "equal educational opportunity." That is, since "equal educational opportunity" is defined by the policies of the school system (New York City); (1) Are the policies arbitrary? and (2) Are the policies implemented arbitrarily? In this regard, the following are major problem areas identified:

(1) Accuracy in projecting registers: If a district received an allocation based on more pupils than actually existed, this would, in effect, increase the actual per pupil allocation of that district. The percent error rather than the net error is important since the relative per pupil advantage is at issue rather than the absolute "windfall" in allocation. That is, if all districts had their registers qually overprojected by the same percentage, no district would be advantaged or disadvantaged even though the net error might have been considerably higher in one district or considerably lower in another. Workload weighting factors and average teacher salary can be seen as affecting this relationship. If two districts had their registers equally overprojected, the district with the higher workload weighting factor and higher average teacher salary would receive the greater "windfall."

However, incorporated into the "allocation formulae" was a method of correcting projection errors. It was the intention of the Board to recoup from districts, any extra funds they received as a result of an erroneous projection within a 2 percent "hold-harmless" limitation. This policy, however, was never enforced. Hence, many districts received excessive "windfalls".

It should be pointed out that the purpose of the "hold-harmless" policy was to allow districts one year to adjust to declining registers. This was to be implemented by providing them with an allocation based on their previous year's register but limiting the additional funding to a maximum of 2 percent. Clearly, this is different from the procedure described in the formulae. While the policy might have merit, the procedure, if implemented, seems totally arbitrary. It would be possible for a district increasing in pupil population to receive this "hold-harmless" adjustment, while a district recording a tremendous decline in register might not. The present "hold-harmless" policy can be viewed only as holding the Central Board harmless of error in register projection rather than serving as an allowance for a district adjusting to a register decline. Under-projections of registers was not viewed as a problem since the Board provided the additional funds via "tipping allocation."

(2) Accuracy in projecting average teacher salary: This factor can easily be seen as significantly affecting the allocation/cost relationship. Any overprojection would result in a district receiving a "windfall," while an underprojection would place a district at a serious disadvantage. Although an erroneous register projection would have a similar effect, at least the Board has considered it in developing its policies. For errors in projecting average teacher salary, no such policy even exists.

In some cases, an overprojection in average teacher salary could have been predicted. In fact, it can be considered a function of its derivation.

With the advent of the fiscal crisis and subsequent budget cuts, district teaching staffs were drastically reduced. The average teacher salary projection by the Board of Education attempted to account for these staff reductions. This was done by not including regular substitute teachers (since they were automatically terminated), and teachers at salary steps 3B and below. This was considered an accurate method since the teachers lowest in seniority would be eliminated. However, one important factor was not considered. This is, teachers were not excessed or laid off as a group but rather by license. As such, in some license areas, such as bilingual, no teacher was excessed or laid off. In fact, in some license areas, additional teachers were hired. Since a large number of teachers holding these licenses were on salary steps below 3B, their salaries were overprojected.

Another problem exists; the projection of average teacher salary was based on teachers assigned to tax levy positions only. To meet contractual obligations, districts are required to place their most senior (highest paid) teachers in 'out-of-the-classroom" positions (where experience is similar.) Since most positions of this type are within reimbursable programs, districts with relatively high reimbursable budgets suffer a reduced average teacher salary since many of their maximum salaried teachers are not included in its derivation. It should be noted that any reduction in a district's average teacher salary reflects a corresponding reduction in this district's supporting percent allocation. Because of this factor, it should be pointed out that those districts which qualify for reimbursable programs, rather than receiving much needed additional support services, actually receive less - less than if they

had no reimbursable programs at all. Further, because the average teacher salary is reduced by the exclusion of teachers in its reimbursable programs, its base Module 2A allocation, as well as its supporting percent allocation are similarly reduced, thus increasing the remaining funds utilized in the per capita allocation. Since these remaining funds are distributed on a per capita basis to all districts, some districts with less reimbursable funds benefit by the inclusion of this factor. It should be pointed out that this analysis also holds true for fringe benefits. However, since fringe benefits are not paid from Module 2 funds no further analysis for the purpose of this research was warranted.

3. "Building Utilization" (pupils per building): Variances in pupils per building between districts represent a major problem area. Districts with a high average of pupils per building will spend less since any cost considered at a per building rate, such as that of principals, would be distributed over a larger number of pupils. Consider the following example:

> School District "X" has 20,000 pupils dispersed throughout 16 school buildings. District "X" would need 16 principals to administer its 16 school buildings. At a cost of $30,000 per principal, District "X" would spend $480,000 for principals or $24. per pupil. District "Y", on the other hand, has an equal pupil population of 20,000, but they are dispersed throughout 24 school buildings. At the same rate of $30,000 per principal, District "Y" would spend $720,000 for principals or $36. per pupil or 50% more than District "X."

If we expand this example to include school secretaries, aides and guards, the impact is most significant.

(4) Operating within the confines of a fiscal year: This problem results from inter-district variances in paying the "summer salaries" for dropped pedagogical positions. Districts are required to pay the July and August salaries of pedagogical employees who worked during the previous school year but who were terminated without replacement during the current school year. This factor can be attributed to the fact that the school year overlaps consecutive fiscal years. That is, the school year runs from September through August, while the fiscal year runs from July through June. Pedagogues earn their July and August (summer) salaries by working September through June. They are paid their summer salaries from their district's next fiscal year's allocations. Districts which have made staff reductions for the current school year are therefore faced with paying the summer salaries of staff no longer providing services out of their current fiscal year's allocation. However, when a district increases in register, and adds positions, it actually experiences a "windfall," in that it is allocated a full teaching position (in dollars), but pays only 10/12 of the cost.

(5) Fiscal Crisis: The fiscal crisis caused major changes in the operation of the school system. In fact, a revised allocation plan was instituted. With the advent of the 1975 United Federation of Teachers' contract, the shortening of the school instructional day, and the reduction of preparation periods of teachers in schools designated Title I eligible, district workload factors were reduced. However, workload factors were not reduced equally throughout the system. For districts of mean register and mean pupil disbursement by educational level, the average Title I district lost approximately 6 percent more positions (loss in allocation) than the average non-Title I district. Adding the effects of summer

pay costs, holding percent decline in pupil registers and average teacher salary constant, this figure becomes approximately 8 percent.

(6) Developing a deliberate educational design: Allocations by design are directly related to educational level. The higher the educational level, the higher the allocation. This fact is built right into the allocation formulae, in that, higher educational levels of pupils produce higher workload factors. With this in mind, it is concluded that a dichotomy possibly exists. Considerable research regarding the educational process seems to indicate the extreme importance of correcting learning disabilities at an early stage of development, especially where an initial retardation is apparent. It has been argued that initial disparities in achievement in subsequent years manifests itself into a condition known as the "cumulative-deficit phenomenon." Achievement patterns diverge as children get older, yet funds are allocated quite the reverse.

It seems apparent that workload weighting factors might not have been developed with the educational process in mind. In fact, workload weighting factors were the product of collective negotiations, and it is doubtful that the resulting contract represented a sound educational plan. Class size limitations, number of preparation and administrative periods and even the length of the instructional day were all determined at the bargaining table, not through an assessment of pupil needs. How and why the variance in workload factors between Title I and non-Title I eligible pupils as well as between educational levels was determined remains a mystery.

Consider the case of two schools bordering on the requirements for Title I eligibility. (Title I eligibility is established when 39.6 percent of a school's pupil population comes from "low income families.") In

School "X" 39 percent of its pupil population comes from "low income" families while in School "Y" 40 percent of its pupil population comes from "low income" families. School "Y" is Title I eligible while School "X" is not. School "Y" receives a higher tax levy allocation since Title I eligible schools have higher workload weighting factors. These extra funds, on top of the additional funds School "Y" receives from the federal government, place School "Y" at a distinct advantage over School "X" in educating its pupil clientele. The disparity in the respective pupil populations of the two schools, however, is minimal, yet there would exist a significant variance in funding. Additionally, it is not unlikely that in terms of need, as measured by percent pupils reading below "minimum competency," School "X" might have required more funds than School "Y", as it is possible that a greater percentage of pupils attending School "X" are reading below "minimum competency."

Summary of General Conclusions

As was evidenced in this research, significant resource disparities existed among the 32 community school districts of New York City. These disparities appeared to be wholly arbitrary or accidental and not due to any deliberate educational design. In this regard, exploration of related problem areas in educational policy formulation is warranted. Before discussing these problem areas or roadblocks, it is necessary to consider the policy question at issue.

What is the relationship between school district size and disparity on the one hand, and educational policy formulation and management on the other as they relate to implementing deliberate and equitable educational design? In analyzing this question, it becomes apparent that

what really is at issue is achieving desired educational outcomes. This implies that specific objectives are defined and to meet these objectives a deliberate educational design is constructed. Further, policies are formulated and management procedures are developed to implement this design. However, as district size and diversity of pupil populations increase, it can easily be hypothesized that appropriate educational designs will necessarily become more varied and/or complex. Inasmuch as educational designs become more varied, so must the policies and practices be more flexible. Yet, experience dictates that quite the opposite is true, as demonstrated by this research. In fact, what can be stated is that it would appear that many policy decisions are made arbitrarily with no, or at best, an inflexible educational design in mind.

If we examine the policy-making process, the first major problem area becomes apparent. Additionally, if we note the "structure" of a large school system, a dichotomy becomes obvious.

Before a resource allocation strategy is determined, local, state, and federal laws, as well as contractual obligations are considered. Many times these laws dictate what should be taught, who should be taught, and who can do the teaching. Contractual obligations further delineate the length of the instructional day, how many pupils may be taught by an individual teacher, how much time during the instructional day each teacher is assigned preparation time, which teacher has the right to which assignment, what duties a teacher may perform and which are forbidden, ad infinitum. These laws and obligations become system-wide requirements. All this before the local school has developed an educational design or planned appropriate interventions for affecting positive educational outcomes. It further discounts the fact that appropriate educational design might be very different from neighborhood to neighborhood and school

site to school site. This might be easier to accept if pupil diversity were very limited (if that were possible). However, in large city school systems the reverse is true. Here, not only are pupils very different, with differing needs, the communities in which they live pose different problems. It appears that the "tail is wagging the dog" rather than the reverse. Further, if good management implies the judicious use of means to accomplish an end, then what takes place in large city school systems cannot be construed as even adequate, since the "means" are established before the "ends" are determined.

This also ignores the fact that necessary or essential services other than direct instructional services for the most part are provided for by the local allocation. Although the need for these additional services such as that for administration (including principals and school secretaries), security, substitute services, etc., might be very different from school to school, the broad criteria utilized in allocation strategies, for the most part, fails to take this into account. Rather, funds (resources) are allocated as if the entire system operated as one giant school. It is this lack of attention to other than direct educational services that represents the second major problem area.

To further clarify this problem, consider the following:

(1) Schools vary in pupil register. Since funds are allocated and not resources, the fact that schools vary in pupil registers (number of pupils) poses a problem in terms of providing necessary or essential services at the school building level. For example, the cost of a school building principal is the same regardless of whether there are 300 or 1,500 pupils attending a school. It should be noted that as the pupil register increases such fixed costs are spread over a greater number of pupils.

(2) Schools vary in physical size and geographic location. This, for example, might pose a problem of varying security needs. If one school has seven entry points and another has three, the number of school aides or guards necessary to provide security might be different. Similarly, those schools whose classrooms are dispersed in two-story structures have different needs than those schools whose classrooms are contained in structures of three or more stories. Also, schools located in more urbanized and/or "high crime" areas will also have different security needs than those located in suburban areas. Another problem in this regard exists in that teacher resources might be allocated on the basis of 32 pupils per classroom teacher while the maximum capacity of some classrooms might be 25 pupils.

A third major problem area exists in operating within the confines of a "fiscal year." If within a district, the school year and the fiscal year governing its budget have different parameters, it is likely that funds obligated in the current year might be paid out of the next fiscal year's allocation. In the New York City example, the "summer pay" problem significantly affected resource equality.

As stated earlier, although these problems can be seen as affecting school districts of all sizes and diversity of pupil populations, they are more pronounced in large city school systems. In fact, what can be stated is that the larger and more diverse the pupil population of a given district, the greater the effect. For example, it is easier to negotiate a contract for the pedagogical employees of a district that reflects a viable educational design if it were to apply to five schools rather than five hundred. Similar circumstances prevail for policymakers

regarding the other aforementioned problem areas. What seems to be called for is revised allocation strategies. However, revisions must be made only on the basis of an improved educational design. This would include the setting-up of an effective information system where specific needs of locales would be brought to the attention of policymakers before policies are determined (i.e. contracts are negotiated). Contracts should be more open-ended. Specifics relating to direct educational interventions such as maximum pupil-teacher ratios should not be considered a contractual provision but rather an educational priority established at the school level.

In the process of revising allocation strategies, direct and indirect educational services must be carefully separated. This is clearly warranted, since a school's educational needs might be very different from a school's ancillary service needs. In some cases, such as that of school security, these services might be better provided for outside of the educational system.

In conclusion, all policies and practices affecting the allocation and expenditure of funds and/or resources must reflect a deliberate educational design. This, the central theme of this research, becomes increasingly important as cities across the nation face devastating budget cuts. Just as allocation strategies must reflect a deliberate educational design, so must reductions in operating budgets be judiciously applied.

APPENDIX A

AN OVERVIEW OF THE OBJECTIVE FORMULAE FOR ALLOCATING MODULE 2 FUNDS TO NEW YORK CITY'S THIRTY-TWO COMMUNITY SCHOOL DISTRICTS FOR FISCAL YEAR 1976

Funds earmarked in the Mayor's expense budget for Community School Districts for fiscal year 1976 were placed in Unit of Appropriation 30. Within Program 30, funds for instructional services were set aside in Module 2. This portion of Program 30 monies was distributed to the thirty-two community school districts via allocation formulae first implemented in fiscal year 1975. In developing this allocation formulae the New York City Board of Education considered the following criteria:

1. The formulae should provide equal educational opportunity for all youth by:

   a. recognizing that workload factors mandate different mixes or "packages" of resources per pupil to insure equal classroom teacher time for all students;

   b. recognizing that dollars must be allocated to compensate for inter-district variations in cost; and

   c. recognizing that diverse pupil populations require different levels of resources.

2. The formulae should support the educational goals and policies of the Board of Education by:

   a. providing the central and local boards and administration with information on the costs and consequences of allocation decisions and obligations; and

   b. providing parents, the public, and city officials with timely information on the budgetary process.[1]

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1. Gifford, Policy Paper No. 3, p. 41.

While it was purported that the formulae for allocating tax levy funds for instructional services is consistent with the aforementioned criteria and objectives, it also provided the framework for identifying the funding a district requires to support its basic classroom workload requirements. In this regard the Board of Education maintained the following to be true:

1. Basic classroom workload requirements are not synonymous with minimum educational requirements.

2. Workload factors are merely the starting point for determining a district's allocation.

3. Funds for other required and supporting services are also essential to provide for individual districts' educational projects.[1]

It is important to note that the Board of Education in recognition of the distinction between workload factors and educational requirements had attempted through the objective formulae to allocate Instructional Services funds for both.

As illustrated in Figure 1 the procedure for allocating Instructional Services monies can be summarized by the following steps:

1. Instructional Services Monies (Module 2) are divided into two parts:

   a. Module 2A for basic classroom obligations and other required and supporting services; and

   b. Module 2B for Special Needs distribution.

2. Within the context of Module 2A it is intended that every community school district be allocated sufficient Instructional Services funds to meet basic classroom workloads.

   a. The formulae for allocating Module 2A funds identify the base number of teachers for each district. The factors considered when calculating the base number of teachers are class size limits; teaching; preparation; and administrative period assignments.

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1. Ibid., p.42

3. The formulae incorporate an adjustment for inter-district teacher salary differences.

4. The remaining funds for basic Instructional Services in Module 2A are allocated to districts for other required and supporting services. (After identifying funds to meet basic classroom workload requirements; remaining Instructional Services funds are distributed to meet community school districts' other required and supporting services including:

   - supervisory personnel, including principals, assistant principals, and teachers-in-charge;
   - additional instructional personnel;
   - librarians;
   - attendance teachers;
   - guidance counselors;
   - substitute service;
   - laboratory specialists;
   - school secretaries;
   - hourly employees;
   - salary changes occurring within the next fiscal year;
   - breakage for grade enrollment in a school;
   - other than personal services (O.T.P.S.); and
   - other charges.

   a. The first part of this supporting allocation is an extension of the funds to meet basic classroom obligations to include additional instructional personnel and step and differential salary changes occurring within the next fiscal year.

   b. The second part of this supporting allocation covers occasional absences costs for substitute services.

   c. The final part of this supporting allocation to districts is made in proportion to weighted registers where the weights are derived from the workload factors.

5. Instructional Services funds in Module 2B (representing 9 percent of the total Module 2 Allocation) is distributed to community school districts on the basis of educational needs.[1]

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1. Ibid., p. 42-44

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